

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A method for the selective oxidation of at least one carbohydrate, a carbohydrate mixture or a composition having a content thereof, where an aqueous solution of the carbohydrate, of the mixture or of the composition is reacted in the presence of a gold catalyst comprising nanodispersed gold particles on a metal oxide support, and of oxygen, where an aldehyde group on the C1 carbon atom of the carbohydrate(s) is selectively oxidized to a carboxyl group, or an aldehyde group is introduced on the C1 carbon atom and selectively oxidized to a carboxyl group.
2. (Original) The method as claimed in claim 1, where the metal oxide support of the gold catalyst is a TiO_2 support.
3. (Currently Amended) The method as claimed in claim 2, where the TiO_2 -supported gold catalyst comprises about 0.1% to 5% gold, ~~preferably about 0.5% to 1% gold.~~
4. (Original) The method as claimed in claim 1, where the metal oxide support of the gold catalyst is an Al_2O_3 support.
5. (Currently Amended) The method as claimed in claim 4, where the Al_2O_3 -supported gold catalyst comprises about 0.1% to 5% gold, ~~preferably about 0.5% to 1% gold.~~
6. (Currently Amended) The method as claimed in claim 1 ~~any of claims 1 to 5~~, where the oxidation is carried out at a pH of from 7 to 11.
7. (Currently Amended) The method as claimed in claim 1 ~~any of claims 1 to 6~~, where the oxidation is carried out at a temperature of from 20°C to 140°C, preferably 40°C to 90°C.
8. (Currently Amended) The method as claimed in claim 1 ~~any of claims 1 to 7~~, where the oxidation is carried out under a pressure of from 1 bar to 25 bar.

9. (Currently Amended) The method as claimed in claim 1 ~~any of claims 1 to 8~~, where at least one of oxygen ~~and/or~~ and air is bubbled through the aqueous solution of the carbohydrate, of the mixture or of the composition during the oxidation.

10. (Currently Amended) The method as claimed in claim 1 ~~any of claims 1 to 9~~, where the ratio between the amount of the carbohydrate(s) to be oxidized or of the mixture and the amount of the gold present on the metal oxide support is greater than 1000.

11. (Currently Amended) The method as claimed in claim 1 ~~any of claims 1 to 10~~, wherein the carbohydrate to be oxidized is an aldose having an aldehyde group on the C1 carbon atom.

12. (Currently Amended) The method as claimed in claim 1 ~~any of claims 1 to 10~~, wherein the carbohydrate to be oxidized is in the 2-ketose form which is initially converted into the oxidizable tautomeric aldose form.

13. (Currently Amended) The method as claimed in claim 11 ~~claim 11 or 12~~, where the carbohydrate to be oxidized is a monosaccharide, an oligosaccharide, a mixture thereof or a composition having a content thereof.

14. (Currently Amended) The method as claimed in claim 11 ~~any of claims 11 to 13~~, where the monosaccharide to be oxidized is glucose, galactose, mannose, xylose or ribose.

15. (Original) The method as claimed in claim 14, where gluconic acid is obtained as oxidation product in the oxidation of glucose.

16. (Original) The method as claimed in claim 13, where the oligosaccharide to be oxidized is a disaccharide.

17. (Currently Amended) The method as claimed in claim 16, where the disaccharide is a disaccharide aldose ~~such as maltose, lactose, cellobiose or isomaltose~~.

18. (Original) The method as claimed in claim 17, where maltobionic acid is obtained as oxidation product in the oxidation of maltose.

19. (Original) The method as claimed in claim 17, where lactobionic acid is obtained as oxidation product in the oxidation of lactose.

20. (Currently Amended) The method as claimed in claim 16, where the disaccharide is a disaccharide 2-ketose ~~such as palatinose~~.

21. (Original) The method as claimed in claim 13, where the carbohydrate to be oxidized is maltodextrin.

22. (Original) The method as claimed in claim 13, where the carbohydrate to be oxidized is a starch syrup.

23. (Original) A method for the selective oxidation of at least one oligosaccharide, a mixture thereof or a composition having a content thereof, where an aqueous solution of the oligosaccharide, of the mixture or of the composition is reacted in the presence of a gold catalyst comprising nanodispersed gold particles on a support, and of oxygen, where an aldehyde group on the C1 carbon atom of the carbohydrate(s) is selectively oxidized to a carboxyl group, or an aldehyde group is introduced on the C1 carbon atom and selectively oxidized to a carboxyl group.

24. (Original) The method as claimed in claim 23, where the support of the gold catalyst employed is a TiO_2 support.

25. (Currently Amended) The method as claimed in claim 24, where the TiO_2 -supported gold catalyst comprises about 0.1% to 5% gold, ~~preferably about 0.5% to 1% gold~~.

26. (Original) The method as claimed in claim 23, where the support of the gold catalyst employed is an Al_2O_3 support.

27. (Currently Amended) The method as claimed in claim 26, where the Al_2O_3 -supported gold catalyst comprises about 0.1% to 5% gold; ~~preferably about 0.5% to 1% gold.~~

28. (Original) The method as claimed in claim 23, where the support of the gold catalyst employed is a carbon support.

29. (Currently Amended) The method as claimed in claim 28, where the carbon-supported gold catalyst comprises about 0.1% to 5% gold; ~~preferably about 0.5% to 1% gold.~~

30. (Currently Amended) The method as claimed in claim 23 ~~any of claims 23 to 29~~, where the oxidation is carried out at a pH of from 7 to 11.

31. (Currently Amended) The method as claimed in claim 23 ~~any of claims 23 to 30~~, where the oxidation is carried out at a temperature of from 20°C to 140°C, preferably 40°C to 90°C.

32. (Currently Amended) The method as claimed in claim 23 ~~any of claims 23 to 31~~, where the oxidation is carried out under a pressure of from 1 bar to 25 bar.

33. (Currently Amended) The method as claimed in claim 23 ~~any of claims 23 to 32~~, where at least one of oxygen ~~and/or~~ and air is bubbled through the aqueous solution of the oligosaccharide, of the mixture or of the composition during the oxidation.

34. (Currently Amended) The method as claimed in claim 23 ~~any of claims 23 to 33~~, where the ratio between the amount of the oligosaccharide(s) to be oxidized or of the mixture and the amount of the gold present on the support is greater than 1000.

35. (Currently Amended) The method as claimed in claim 23 ~~any of claims 23 to 34~~, where the oligosaccharide to be oxidized is an aldose having an aldehyde group on the C1 carbon atom.

36. (Original) The method as claimed in claim 35, where the oligosaccharide to be oxidized is a disaccharide aldose.

37. (Original) The method as claimed in claim 36, where the disaccharide aldose is maltose, lactose, cellobiose or isomaltose.

38. (Original) The method as claimed in claim 37, where maltobionic acid is obtained as oxidation product in the oxidation of maltose.

39. (Original) The method as claimed in claim 37, where lactobionic acid is obtained as oxidation product in the oxidation of lactose.

40. (Currently Amended) The method as claimed in claim 23 ~~any of claims 23 to 34~~, where the oligosaccharide to be oxidized is in the 2-ketose form which is converted into the oxidizable tautomeric aldose form before the oxidation.

41. (Original) The method as claimed in claim 40, where the oligosaccharide to be oxidized is a disaccharide 2-ketose.

42. (Original) The method as claimed in claim 41, where the disaccharide ketose is palatinose.

43. (Currently Amended) The method as claimed in claim 23 ~~any of claims 23 to 34~~, where the oligosaccharide mixture to be oxidized is maltodextrin.

44. (Currently Amended) The method as claimed in claim 23 ~~any of claims 23 to 34~~, where the composition to be oxidized is a starch syrup.

45. (Currently Amended) An oxidation product obtainable by selective oxidation of maltose by use of a gold catalyst comprising nanodispersed gold particles on a metal oxide support by a method ~~as claimed in any of claims 1 to 22~~ wherein an aqueous solution of the maltose is

reacted in the presence of the gold catalyst, and of oxygen, where an aldehyde group on the C1 carbon atom of the maltose is selectively oxidized to a carboxyl group, or an aldehyde group is introduced on the C1 carbon atom and selectively oxidized to a carboxyl group, or by use of a gold catalyst comprising nanodispersed gold particles on a support by [[a]] the method as claimed in claim 23 ~~any of claims 23 to 44~~, where the oxidation product comprises more than 95% maltobionic acid.

46. (Currently Amended) An oxidation product obtainable by selective oxidation of lactose by use of a gold catalyst comprising nanodispersed gold particles on a metal oxide support by a method ~~as claimed in any of claims 1 to 22~~ wherein an aqueous solution of the lactose is reacted in the presence of the gold catalyst, and of oxygen, wherein an aldehyde group on the C1 carbon of the lactose is selectively oxidized to a carboxyl group, or an aldehyde group is introduced on the C1 carbon atom and selectively oxidized to a carboxyl group, or by use of a gold catalyst comprising nanodispersed gold particles on a support by a method as claimed in claim 23 ~~any of claims 23 to 44~~, where the oxidation product comprises more than 95% lactobionic acid.

Claims 47-72 (Canceled).

Add the following new claims:

73. (New) The method as claimed in claim 3, wherein the TiO_2 -supported gold catalyst comprises about 0.5% to 1% gold.

74. (New) The method as claimed in claim 5, wherein the Al_2O_3 -supported gold catalyst comprises about 0.5% to 1% gold.

75. (New) The method as claimed in claim 17, wherein the disaccharide is selected from the group consisting of maltose, lactose, cellobiose and isomaltose.

76. (New) The method as claimed in claim 20, wherein the disaccharide is palatinose.

77. (New) The method as claimed in claim 25, wherein the TiO_2 -supported gold catalyst comprises about 0.5% to 1% gold.

78. (New) The method as claimed in claim 27, wherein the Al_2O_3 -supported gold catalyst comprises about 0.5% to 1% gold.

79. (New) The method as claimed in claim 29, wherein the carbon-supported gold catalyst comprises about 0.5% to 1% gold.